

We've finished the February 10, 2015 Bulletin 120 (B120) forecasts update. The forecasts include observed conditions through the morning of February 10, 2015. The forecasts are posted at <http://cdec.water.ca.gov/cgi-progs/iodir?s=b120up>.

#### **Forecast Summary:**

The projected median April-July runoff in the major Sierra river basins ranges from 13 percent on the Tule River to 67 percent on the Total Inflow to Shasta Lake. On average, the forecasts for the Sacramento River Region, San Joaquin Region, and Tulare Lake Region changed by 3, 0, and -1 percent, respectively. All rivers north of the Merced River saw an increase in the forecast, with the maximum increase on the Sacramento River at Bend Bridge (4 percent). All rivers south of the Merced River saw a drop of 1 to 2 percent in the April-July forecast. The Merced River forecast remained equal to the February 1 forecast.

#### **Runoff:**

The daily Full Natural Flow (FNF) data for February 2015 indicates that from the 5<sup>th</sup> to the 6<sup>th</sup>, the summed flows in rivers north of the American River increased by a factor of about 5. Considering the rivers south of the Mokelumne, the summed flows increased by a factor of about 4 but from the 6<sup>th</sup> to the 7<sup>th</sup>. Despite the large storm early in February, the flows for the first 7 days of February in all major rivers were still less than normal except for the Shasta Inflow and the flows at Bend Bridge which were at rates near 110 percent of average.

#### **Precipitation:**

Precipitation for the 2014-15 water year accumulated at the following rates of average:

<b>Region/Index</b>	<b>WY accumulated Precipitation through February 12, 2015 units= percent of average</b>
Northern Sierra 8-Station Index	<b>101 (30.3 inches)</b>
San Joaquin 5-Station Index	<b>55 (12.9 inches)</b>

The jet stream is not forecasted to be over California for the next six days. It is currently residing over British Columbia. The Northern Sierra 8-Station Index and the San Joaquin 5-station Index accumulated 7.2 and 3.6 inches of precipitation since February 1. These gains represent 90 and 52 percent of a normal February total for the Northern Sierra 8-Station Index and the San Joaquin 5-station Index.

The snowpack as of the morning of February 10, 2015 stands at the following (based on snow sensors):

<b>Region</b>	<b>Snow Water Equivalent (inches)</b>	<b>% of Average (Apr. 1)</b>	<b>% of Average (Feb. 10)</b>
Northern	<b>5.3</b>	<b>18</b>	<b>25</b>
Central	<b>6.3</b>	<b>21</b>	<b>29</b>
Southern	<b>4.9</b>	<b>18</b>	<b>26</b>
Statewide	<b>5.6</b>	<b>19</b>	<b>27</b>

In comparison to February 1 snow conditions, snow water equivalent for the Northern, Central, and Southern Sierras increased by 1.0, 1.9, and 1.0 inches, respectively, thanks to the atmospheric river in the first week of February. This equates to an increase in the percent of April 1 average of 3, 7, 4, and 4 percent for the same four regions.

#### **Weather and Climate Outlooks:**

The 6-day weather forecast indicates no precipitation. Freezing levels over the Sierra are expected to range between 12,000 and 14,000 feet during the period. The highest freezing levels are expected today.

The NWS Climate Prediction Center (CPC) one-month outlook for February, issued January 31, indicates increased chances of above normal precipitation for the North Coast of California and, elsewhere, equal chances of above or below normal precipitation are expected. Temperatures are expected to be above normal for the entire state.

The CPC three-month (February-March-April) outlook, issued January 15, indicates increased chances of above normal precipitation for all of California south of Lake Tahoe and the San Francisco Bay area. Elsewhere, the same forecast calls for equal chances of above or below normal precipitation. Increased chances of above normal temperatures are predicted for the entire state.

There is an approximately 50-60 percent chance of El Nino within the late Northern Hemisphere winter and early spring, with ENSO-neutral slightly favored thereafter.

**Next Update:**

A Bulletin 120 update for conditions as of February 17 will be available Thursday, February 19. If you have any questions regarding this forecast, please contact a member of the Snow Surveys staff.